

Attachment A – ACL Complaint No. R5-2015-0522
Specific Factors Considered for Administrative Civil Liability
Brent Alan Vanderkam Assessor Parcel Number 099-120-035-000, Shasta County

The State Water Board's *Water Quality Enforcement Policy* (Enforcement Policy) establishes a methodology for determining administrative civil liability by addressing the factors that are required to be considered under California Water Code section 13385, subdivision (e). Each factor of the nine-step approach is discussed below, as is the basis for assessing the corresponding score. The Enforcement Policy can be found at:

http://www.swrcb.ca.gov/water_issues/programs/enforcement/docs/enf_policy_final111709.pdf

VIOLATION 1 – STORM WATER DISCHARGES TO UNNAMED TRIBUTARY OF CLOVER CREEK

Step 1 – Potential for Harm for Discharge Violations

The “potential harm to beneficial uses” factor considers the harm that may result from exposure to the pollutants in the illegal discharge, while evaluating the nature, circumstances, extent, and gravity of the violation(s). A three-factor scoring system is used for each violation or group of violations: (1) the potential for harm to beneficial uses; (2) the degree of toxicity of the discharge; and (3) whether the discharge is susceptible to cleanup or abatement.

Factor 1: Harm or Potential Harm to Beneficial Uses.

This factor evaluates direct or indirect harm or potential for harm from the violation. A score between 0 and 5 is assigned based on a determination of whether the harm or potential for harm to beneficial uses ranges from negligible (0) to major (5).

Clover Creek is tributary to Cow Creek and hence the Sacramento River. Existing and potential beneficial uses for Cow Creek that could be impacted from unauthorized discharge include the following: Municipal & Domestic Supply (MUN); Agricultural Supply (AGR); Industrial Power (POW); Water Contact (REC-1) & Other Non-contact Recreation (REC-2); Cold (COLD) Freshwater Habitat; Migration of Cold Freshwater Aquatic Organisms (MIGR); Spawning of Warm & Cold Freshwater Aquatic Organisms (SPWN); and Wildlife Habitat (WILD). Storm water from 11550 Buggy Road, Millville (hereafter referred to as the Site) discharged to an unnamed class II tributary of Clover Creek (Unnamed Tributary). Beneficial uses of any specifically identified water body generally apply to all of its tributaries. Spawning, warm, and cold freshwater habitats were the beneficial uses most obviously affected by storm water discharges from the Site.

On at least 20 days, but likely more, during the period between 1 July 2014 and 6 February 2015, nutrient and sediment-laden storm water discharged to the Unnamed Tributary. During the 21 November 2014 inspection, turbidity violations exceeding background levels were observed downstream from the site discharge in the Unnamed Tributary, and samples collected upstream, downstream, and from site runoff, were analyzed and revealed elevated levels of nutrients in downstream samples. Evidence of algal blooms and sediment plumes were also observed and photographed at the Site.

A drive-by of the property conducted on 19 February 2015 and inspection of the culvert through which the Unnamed Tributary passed under Buggy Road, indicated continuing

sediment deposition in the streambed and along rocks as well as nutrient content based on the presence of algal growth. Views from the road indicated no change in site conditions and/or cleanup at that time.

The observed harm to beneficial uses was determined to be “Moderate” which is defined as “moderate threat to beneficial uses (i.e., no observed impacts but potential impacts to beneficial uses with no appreciable acute or chronic effects).” A score of 3 is assigned for this factor.

Factor 2: The Physical, Chemical, Biological or Thermal Characteristics of the Discharge.

A score between 0 and 4 is assigned based on a determination of the risk or threat of the discharged material. “Potential receptors” are those identified considering human, environmental, and ecosystem exposure pathways.

Clover Creek is listed on the State’s Clean Water Act (CWA) 303d list of impaired water bodies for fecal coliform and may be sensitive to contaminants such as: additional coliforms, nutrients, and low dissolved oxygen resulting from nutrient load and organic content. Discharge from the Site to the Unnamed Tributary caused elevation of nutrient concentrations in excess of background levels and exceeded the *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, Fourth Edition* (Basin Plan) objectives for turbidity. The current site conditions present a continuing threat of discharge and have shown continued sediment deposition. Discharges from the Site are deleterious to aquatic life and may cause a chronic impact due to habitat degradation.

The discharged material posed a moderate risk or threat to potential receptors (i.e., the chemical and/or physical characteristics of the discharged material have some level of toxicity or pose a moderate level of concern regarding receptor protection). A score of 2 was assigned for this factor.

Factor 3: Susceptibility to Cleanup or Abatement.

A score of 0 is assigned for this factor if 50% or more of the discharge is susceptible to cleanup or abatement. A score of 1 is assigned if less than 50% of the discharge is susceptible to cleanup or abatement. This factor is evaluated regardless of whether the discharge was actually cleaned up or abated by the discharger.

Less than 50% of the discharge from the Site was susceptible to cleanup or abatement, as the discharges entered the Unnamed Tributary to Clover Creek and are no longer on Site. Therefore, a factor of 1 is assigned.

Final Score – “Potential for Harm”

The scores of the three factors are added to provide a Potential for Harm score for each violation or group of violations. In this case, **a final score of 6** was calculated. The total score is then used in Step 2, below.

1. Per Gallon Assessments for Discharge Violations

When there is a discharge, the Board is to determine an initial liability amount on a per gallon basis, using the Potential for Harm score and the extent of Deviation from Requirement of the violation. The Potential for Harm Score was determined above, and is 6.

The Deviation from Requirement reflects the extent to which the violation deviates from the specific requirement (effluent limitation, prohibition, monitoring requirement, etc.) that was violated. For this discharge, the Deviation from Requirement is considered “**Major**” because the Discharger did not comply with the Water Code requirement to apply for a permit before discharging, or allowing his lessee to discharge, pollutants to waters of the U.S.

Table 1 of the Enforcement Policy (p. 14) is used to determine a “per gallon factor” based on the total score from Step 1 and the level of Deviation from Requirement. For this particular case, the factor is **0.22**. This value is multiplied by the volume of discharge and the per gallon civil liability, as described below.

For the penalty calculation, Staff used a highly conservative estimate of 734,901 gallons for the volume of discharge. The following paragraphs describe how the volume was determined.

Using the USDA Natural Resources Conservation Service - Conservation Engineering Division Technical Release 55 Method (USDA TR-55 Method) and based on characteristics of the site (Newly graded area with no vegetation, Hydrologic Soil Group D) Staff calculated that precipitation events greater than 0.13 inches of rain over 24 hours would generate runoff from the Site. Although Staff believes 0.13 inches of rainfall would generate storm water runoff as the calculations suggest, staff confirmed during the 21 November inspection that 0.38 inches of rainfall in a 24 hour period generates storm water runoff given site specific characteristics. Therefore, although highly conservative, 0.38 inches of rainfall in a 24 hour period was used for the purposes of identifying storm water discharge events at this Site. Staff obtained precipitation data from a Department of Water Resources/Flood Management gauging station (WHT CalFire Station; Latitude 40.6194; Longitude -121.8994) located approximately 5.8 miles west of the Site. Using this data, Staff identified twenty (20) days with 0.38 inches of precipitation or greater over a 24 hour period, between 30 May 2014 through February 2015.

Even using storm events with greater than 0.38 inches of precipitation, although conservative considering the soil type and runoff potential, Staff recognizes there are still considerations including percolation/infiltration of ponding water and alternate drainage that may affect volume totals. Therefore, Staff have concluded to take an highly conservative approach in calculating storm water discharge to the Unnamed Tributary and calculate storm water in excess of 0.38 inches to mitigate other factors. Table 1 below summarizes qualifying storm events, calculated gallons of runoff generated, and volume subject to penalties for both cases. For purposes of penalty calculations, Staff are considering the most conservative storm water runoff calculations.

During the 21 November 2014 inspection Staff identified one major source of storm water runoff at the convergence of the Site and the Unnamed Tributary to the

northwest corner of the graded area. The just over two-acre portion of disturbed soil was cleared and void of vegetation, with the exception of 93 grow bags that remained in the center of the graded area. This disturbed land includes two large, steep-sloped berms flanking the western and southern sides of the graded area. The Site was devoid of any erosion control measures/implementation of Storm water Best Management Practices.

The first of 20 storm events in which storm water runoff was generated and discharged from the Site occurred on 25 September 2014. A total of 1.42 inches of precipitation were recorded at the WHT CalFire Station on this date. Using the USDA TR-55 method, Staff calculated that 52,617 gallons of storm water were discharged from the graded/disturbed area to the Unnamed Tributary.

The second storm event where storm water runoff discharged from the Site occurred on 20 October 2014 where 0.87 inches of precipitation were recorded at the WHT CalFire Station on this date. Using the USDA TR-55 method, Staff calculated that 24,277 gallons of storm water were discharged from the graded/disturbed area to the Unnamed Tributary.

The third storm event where storm water runoff discharged from the Site occurred on 23 October 2014. A total of 0.54 inches of precipitation were recorded at the WHT CalFire Station on this date. Using the USDA TR-55 method, Staff calculated that 9,843 gallons of storm water were discharged from the graded/disturbed area to the Unnamed Tributary.

The fourth storm event where storm water runoff discharged from the Site occurred on 25 October 2014. A total of 1.11 inches of precipitation were recorded at the WHT CalFire Station on this date. Using the USDA TR-55 method, Staff calculated that 36,217 gallons of storm water were discharged from the graded/disturbed area to the Unnamed Tributary.

The fifth storm event where storm water runoff discharged from the Site occurred on 31 October 2014. A total of 1.25 inches of precipitation were recorded at the WHT CalFire Station on this date. Using the USDA TR-55 method, Staff calculated that 43,516 gallons of storm water were discharged from the graded/disturbed area to the Unnamed Tributary.

The sixth storm event where storm water runoff discharged from the Site occurred on 19 November 2014. A total of 0.41 inches of precipitation were recorded at the WHT CalFire Station on this date. Using the USDA TR-55 method, Staff calculated that 5,267 gallons of storm water were discharged from the graded/disturbed area to the Unnamed Tributary.

The seventh storm event where storm water runoff discharged from the Site occurred on 20 November 2014. A total of 0.38 inches of precipitation were recorded at the WHT CalFire Station on this date. Using the USDA TR-55 method,

Staff calculated that 4,349 gallons of storm water were discharged from the graded/disturbed area to the Unnamed Tributary.

The eighth storm event where storm water runoff discharged from the Site occurred on 21 November 2014. A total of 0.45 inches of precipitation were recorded at the WHT CalFire Station on this date. Using the USDA TR-55 method, Staff calculated that 6,579 gallons of storm water were discharged from the graded/disturbed area to the Unnamed Tributary.

The ninth storm event where storm water runoff discharged from the Site occurred on 29 November 2014. A total of 1.02 inches of precipitation were recorded at the WHT CalFire Station on this date. Using the USDA TR-55 method, Staff calculated that 31,642 gallons of storm water were discharged from the graded/disturbed area to the Unnamed Tributary.

The tenth storm event where storm water runoff discharged from the Site occurred on 30 November 2014. A total of 0.56 inches of precipitation were recorded at the WHT CalFire Station on this date. Using the USDA TR-55 method, Staff calculated that 10,619 gallons of storm water were discharged from the graded/disturbed area to the Unnamed Tributary.

The eleventh storm event where storm water runoff discharged from the Site occurred on 3 December 2014. A total of 2.63 inches of precipitation were recorded at the WHT CalFire Station on this date. Using the USDA TR-55 method, Staff calculated that 212,267 gallons of storm water were discharged from the graded/disturbed area to the Unnamed Tributary.

The twelfth storm event where storm water runoff discharged from the Site occurred on 5 December 2014. A total of 0.75 inches of precipitation were recorded at the WHT CalFire Station on this date. Using the USDA TR-55 method, Staff calculated that 18,687 gallons of storm water were discharged from the graded/disturbed area to the Unnamed Tributary.

The thirteenth storm event where storm water runoff discharged from the Site occurred on 6 December 2014. A total of 0.58 inches of precipitation were recorded at the WHT CalFire Station on this date. Using the USDA TR-55 method, Staff calculated that 11,411 gallons of storm water were discharged from the graded/disturbed area to the Unnamed Tributary.

The fourteenth storm event where storm water runoff discharged from the Site occurred on 10 December 2014. A total of 1.87 inches of precipitation were recorded at the WHT CalFire Station on this date. Using the USDA TR-55 method, Staff calculated that 77,561 gallons of storm water were discharged from the graded/disturbed area to the Unnamed Tributary.

The fifteenth storm event where storm water runoff discharged from the Site occurred on 11 December 2014. A total of 3.43 inches of precipitation were

recorded at the WHT CalFire Station on this date. Using the USDA TR-55 method, Staff calculated that 168,324 gallons of storm water were discharged from the graded/disturbed area to the Unnamed Tributary.

The sixteenth storm event where storm water runoff discharged from the Site occurred on 12 December 2014. A total of 0.55 inches of precipitation were recorded at the WHT CalFire Station on this date. Using the USDA TR-55 method, Staff calculated that 10,229 gallons of storm water were discharged from the graded/disturbed area to the Unnamed Tributary.

The seventeenth storm event where storm water runoff discharged from the Site occurred on 15 December 2014. A total of 0.69 inches of precipitation were recorded at the WHT CalFire Station on this date. Using the USDA TR-55 method, Staff calculated that 16,020 gallons of storm water were discharged from the graded/disturbed area to the Unnamed Tributary.

The eighteenth storm event where storm water runoff discharged from the Site occurred on 19 December 2014. A total of 0.72 inches of precipitation were recorded at the WHT CalFire Station on this date. Using the USDA TR-55 method, Staff calculated that 17,341 gallons of storm water were discharged from the graded/disturbed area to the Unnamed Tributary.

The nineteenth storm event where storm water runoff discharged from the Site occurred on 2 February 2015. A total of 0.57 inches of precipitation were recorded at the WHT CalFire Station on this date. Using the USDA TR-55 method, Staff calculated that 11,013 gallons of storm water were discharged from the graded/disturbed area to the Unnamed Tributary.

The last of the 20 precipitation events where storm water runoff discharged from the Site occurred on 6 February 2015. A total of 1.88 inches of precipitation were recorded at the WHT CalFire Station on this date. Using the USDA TR-55 method, Staff calculated that 78,125 gallons of storm water were discharged from the graded/disturbed area to the Unnamed Tributary.

For the purposes of the penalty calculation, Staff are using a discharge volume of 754,901 gallons (of this amount, 734,901 gallons are subject to penalties as described below). The maximum civil liability allowed under Water Code section 13385 is \$10 per gallon discharged. The Per Gallon Assessment is calculated as (0.22 factor from Table 1) x (734,901 gallons) x (\$10 per gallon). The value is \$1,616,782.

Discharge Event	Date	Total Precipitation			
		Precipitation (inches)	Runoff Volume (gallons)	Total Subject to Penalties (Volume - 1000 gallons)	Days of Violation Subject to Penalties
#1	25-Sep-2014	1.42	52,617	51,617	1
#2	20-Oct-2014	0.87	24,277	23,277	1
#3	23-Oct-2014	0.54	9,843	8,843	1
#4	25-Oct-2014	1.11	36,217	35,217	1

#5	31-Oct-2014	1.25	43,516	42,516	1
#6	19-Nov-2014	0.41	5,267	4,267	1
#7	20-Nov-2014	0.38	4,349	3,349	1
#8	21-Nov-2014	0.45	6,579	5,579	1
#9	29-Nov-2014	1.02	31,642	30,642	1
#10	30-Nov-2014	0.56	10,619	9,619	1
#11	3-Dec-2014	2.63	121,267	120,267	1
#12	5-Dec-2014	0.75	18,687	17,687	1
#13	6-Dec-2014	0.58	11,411	10,411	1
#14	10-Dec-2014	1.87	77,561	76,561	1
#15	11-Dec-2014	3.43	168,324	167,324	1
#16	12-Dec-2014	0.55	10,229	9,229	1
#17	15-Dec-2014	0.69	16,020	15,020	1
#18	19-Dec-2014	0.72	17,341	16,341	1
#19	2-Feb-2015	0.57	11,013	10,013	1
#20	6-Feb-2015	1.88	78,125	77,125	1
Total Discharge Volume			754,901		20
Total Subject to Penalties				734,901	

2. Per Day Assessments for Discharge Volumes

When there is a discharge, the Water Board is to determine an initial liability amount on a per day basis using the same Potential for Harm factor score (6) and the extent of Deviation from Requirement (Major) that were used in the per-gallon analysis. The “per day” factor (determined from Table 2 of the Enforcement Policy) is **0.22**.

The discharges that are the subject of this enforcement action occurred on at least seven different days. Therefore, the Per Day Assessment is calculated as (0.22 factor from Table 2) x (20 days) x (\$10,000 per day). The value is \$44,000.

Initial Liability Amount: The value is determined by adding together the per gallon assessment and the per day assessment. For this case, the total is \$1,616,782+ \$44,000 for a total initial liability amount of **\$1,660,782**.

Step 3 – Per Day Assessment for Non-Discharge Violation

The Enforcement Policy states that the Board shall calculate an initial liability for each non-discharge violation. In this case, this factor does not apply because all of the violations are related to the discharge from the Site, and the liability was determined in Step 2.

Step 4 – Adjustment Factors

There are three additional factors to be considered for modification of the amount of initial liability: the violator’s culpability, efforts to clean up or cooperate with regulatory authority, and the violator’s compliance history. After each of these factors is considered for the violations involved, the applicable factor should be multiplied by the proposed amount for each violation to determine the revised amount for that violation.

Culpability

Higher liabilities should result from intentional or negligent violations as opposed to accidental violations. A multiplier between 0.5 and 1.5 is to be used, with a higher multiplier for negligent behavior. The Discharger was given a multiplier value of **1** because the Discharger did not comply with the Water Code requirement to apply for a permit before discharging, or allowing his lessee to discharge, pollutants to waters of the U.S. and was aware that some type of permitting was necessary to conduct excavation activities but failed to apply for such permits.

Cleanup and Cooperation

This factor reflects the extent to which a discharger voluntarily cooperated in returning to compliance and correcting environmental damage. A multiplier between 0.75 and 1.5 is to be used, with a higher multiplier when there is a lack of cooperation. The Discharger has been willing to cooperate with cleanup actions and has hired an engineering consultant to comply with orders as outlined in the Draft Cleanup and Abatement Order. Therefore, the Discharger was given a multiplier value of **0.75**.

History of Violation

When there is a history of repeat violations, the Enforcement Policy indicates a minimum multiplier of 1.1 to be used. The Discharger does not have a history of violations with the Central Valley Water Board. Therefore, the History of Violation factor is **1.0**.

Step 5 - Determination of Total Base Liability Amount

The Total Base Liability is determined by applying the adjustment factors from Step 4 to the Initial Liability Amount determined in Step 2.

Total Base Liability Amount: This value is calculated as the Initial Liability Amount (\$1,660,782) x Adjustment Factors (1) (0.75) (1) and is equal to **\$1,245,587**.

VIOLATION 2 – DISCHARGES OF FILL MATERIAL TO UNNAMED TRIBUTARY OF CLOVER CREEK

Step 1 – Potential for Harm for Discharge Violations

The “potential harm to beneficial uses” factor considers the harm that may result from exposure to the pollutants in the illegal discharge, while evaluating the nature, circumstances, extent, and gravity of the violation(s). A three-factor scoring system is used for each violation or group of violations: (1) the potential for harm to beneficial uses; (2) the degree of toxicity of the discharge; and (3) whether the discharge is susceptible to cleanup or abatement.

Factor 1: Harm or Potential Harm to Beneficial Uses.

This factor evaluates direct or indirect harm or potential for harm from the violation. A score between 0 and 5 is assigned based on a determination of whether the harm or potential for harm to beneficial uses ranges from negligible (0) to major (5).

Clover Creek is tributary to Cow Creek and hence the Sacramento River. Existing and potential beneficial uses for Cow Creek that could be impacted from unauthorized discharge include the following: Municipal & Domestic Supply (MUN); Agricultural Supply (AGR);

Industrial Power (POW); Water Contact (REC-1) & Other Non-contact Recreation (REC-2); Cold (COLD) Freshwater Habitat; Migration of Cold Freshwater Aquatic Organisms (MIGR); Spawning of Warm & Cold Freshwater Aquatic Organisms (SPWN); and Wildlife Habitat (WILD). Storm water from 11550 Buggy Road, Millville (hereafter referred to as the "Site") discharged to an unnamed class II tributary of Clover Creek (Unnamed Tributary). Beneficial uses of any specifically identified water body generally apply to all of its tributaries. Staff calculated more than 427 cubic yards of fill within the Unnamed Tributary diverting natural flow. The aforementioned drive-by of the property on 19 February 2015 indicated no change in site conditions and/or cleanup of the fill placed in the Unnamed Tributary streambed.

The observed harm to beneficial uses was determined to be "Moderate" which is defined as "moderate threat to beneficial uses (i.e., no observed impacts but potential impacts to beneficial uses with no appreciable acute or chronic affects)." A score of 3 is assigned for this factor.

Factor 2: The Physical, Chemical, Biological or Thermal Characteristics of the Discharge.

A score between 0 and 4 is assigned based on a determination of the risk or threat of the discharged material. "Potential receptors" are those identified considering human, environmental, and ecosystem exposure pathways.

The Unnamed Tributary where fill material was discharged was significantly affected in its downstream reaches by increased siltation, turbidity, and fines in the stream substrate. Discharges from the Site are deleterious to aquatic life and may cause a chronic impact due to habitat degradation and continued stream diversion.

The discharged material posed a moderate risk or threat to potential receptors (i.e., the chemical and/or physical characteristics of the discharged material have some level of toxicity or pose a moderate level of concern regarding receptor protection). A score of 2 was assigned for this factor.

Factor 3: Susceptibility to Cleanup or Abatement.

A score of 0 is assigned for this factor if 50% or more of the discharge is susceptible to cleanup or abatement. A score of 1 is assigned if less than 50% of the discharge is susceptible to cleanup or abatement. This factor is evaluated regardless of whether the discharge was actually cleaned up or abated by the discharger.

More than 50% of the discharged fill material on the Site is susceptible to cleanup or abatement. Therefore, a factor of 0 is assigned.

Final Score – "Potential for Harm"

The scores of the three factors are added to provide a Potential for Harm score for each violation or group of violations. In this case, **a final score of 5** was calculated. The total score is then used in Step 2, below.

Step 2 – Assessment for Discharge Violations

This step addresses administrative civil liabilities for the spills based on both a per-gallon and a per-day basis.

1. Per Gallon Assessments for Discharge Violations

When there is a discharge, the Board is to determine an initial liability amount on a per gallon basis, using the Potential for Harm score and the extent of Deviation from Requirement of the violation. The Potential for Harm Score was determined above, and is 5.

The Deviation from Requirement reflects the extent to which the violation deviates from the specific requirement (effluent limitation, prohibition, monitoring requirement, etc.) that was violated. For this discharge, the Deviation from Requirement is considered “**Major**” because the Discharger did not comply with the Water Code requirement to apply for a permit before discharging, or allowing his lessee to discharge, pollutants to waters of the U.S.

Table 1 of the Enforcement Policy (p. 14) is used to determine a “per gallon factor” based on the total score from Step 1 and the level of Deviation from Requirement. For this particular case, the factor is **0.15**. This value is multiplied by the volume of discharge and the per gallon civil liability, as described below. For the penalty calculation, Staff used a conservative estimate of 85,242 gallons for the volume of fill material discharged.

For the purposes of the penalty calculation, Staff is using a discharge volume of 86,242 gallons (of this amount, 85,242 gallons are subject to penalties as described below). The maximum civil liability allowed under Water Code section 13385 is \$10 per gallon discharged. The Per Gallon Assessment is calculated as (0.15 factor from Table 1) x (85,242 gallons) x (\$10 per gallon). The value is **\$127,863**.

The Discharger and/or a third party with Discharger’s consent discharged approximately 427 cubic yards of fill material into waters of the United States on the Site during construction of a berm. Each cubic yard of fill is equal to approximately 202 gallons. Accordingly, Staff conservatively estimates the discharge volume of 86,242 gallons of fill material directly to the Unnamed Tributary.

2. Per Day Assessments for Discharge Volumes

When there is a discharge, the Water Board is to determine an initial liability amount on a per day basis using the same Potential for Harm factor score (5) and the extent of Deviation from Requirement (Major) that were used in the per-gallon analysis. The “per day” factor (determined from Table 2 of the Enforcement Policy) is **0.15**.

The discharge of the fill material into the streambed to construct the berm could have occurred in a single day. Therefore, to remain conservative for the purposes of this enforcement action, the discharges are assumed to have occurred on a single day. The Per Day Assessment is calculated as (0.15 factor from Table 2) x (1 day) x (\$10,000 per day). The value is **\$1,500**.

Initial Liability Amount: The value is determined by adding together the per gallon assessment and the per day assessment. For this case, the total is \$127,863 + \$1,500 for a total initial liability amount of **\$129,363**.

Step 3 – Per Day Assessment for Non-Discharge Violation

The Enforcement Policy states that the Board shall calculate an initial liability for each non-discharge violation. In this case, this factor does not apply because all of the violations are related to the discharge from the Site, and the liability was determined in Step 2.

Step 4 – Adjustment Factors

There are three additional factors to be considered for modification of the amount of initial liability: the violator's culpability, efforts to clean up or cooperate with regulatory authority, and the violator's compliance history. After each of these factors is considered for the violations involved, the applicable factor should be multiplied by the proposed amount for each violation to determine the revised amount for that violation.

Culpability

Higher liabilities should result from intentional or negligent violations as opposed to accidental violations. A multiplier between 0.5 and 1.5 is to be used, with a higher multiplier for negligent behavior. The Discharger was given a multiplier value of **1** because the Discharger did not comply with the Water Code requirement to apply for a permit before discharging, or allowing his lessee to discharge, pollutants to waters of the U.S. and was aware that some type of permitting was necessary to conduct excavation activities but failed to apply for such permits.

Cleanup and Cooperation

This factor reflects the extent to which a discharger voluntarily cooperated in returning to compliance and correcting environmental damage. A multiplier between 0.75 and 1.5 is to be used, with a higher multiplier when there is a lack of cooperation. The Discharger has been willing to cooperate with cleanup actions and has hired an engineering consultant to comply with orders as outlined in the Draft Cleanup and Abatement Order. Therefore, the Discharger was given a multiplier value of **0.75**.

History of Violation

When there is a history of repeat violations, the Enforcement Policy indicates a minimum multiplier of 1.1 to be used. The Discharger does not have a history of violations with the Central Valley Water Board. Therefore, the History of Violation factor is **1.0**.

Step 5 - Determination of Total Base Liability Amount

The Total Base Liability is determined by applying the adjustment factors from Step 4 to the Initial Liability Amount determined in Step 2.

Total Base Liability Amount: This value is calculated as the Initial Liability Amount (\$129,363) x Adjustment Factors (1) (0.75) (1) and is equal to **\$97,022**.

COMBINED TOTAL BASE LIABILITY AND FACTORS APPLIED TO ALL VIOLATIONS

The combined Total Base Liability Amount for both violations is **\$1,342,609** (\$1,245,587 + \$97,022 = \$1,342,609).

The following factors apply to the combined Total Base Liability Amounts for all of the violations discussed above.

Step 6 - Ability to Pay and Ability to Continue in Business

The ability to pay and to continue in business factor must be considered when assessing administrative civil liabilities. Mr. Vanderkam has the ability to pay some of the total base liability amount proposed based on the fact that over the past two years he has purchased and owns over \$500,000 in real property in California and Virginia. Both properties have mortgages, however, it is not known at this time the extent to which those mortgages have been paid-off. It is also not known what other sources of income and/or assets are available to Mr. Vanderkam. Based on currently available information alone, it is unlikely that Mr. Vanderkam has the ability to pay the entire Total Base Liability Amount \$1,342,609. Mr. Vanderkam does however have significant real property assets and a source of income sufficient to obtain financing for those purchases. Accordingly, Staff used a multiplier of 0.15 to adjust the total base liability amount down to \$201,400 based on the Discharger's ability to pay.

Step 7 – Other Factors as Justice May Require

If the Central Valley Water Board believes that the amount determined using the above factors is inappropriate, the amount may be adjusted under the provision for "other factors as justice may require," but only if express findings are made to justify this.

Step 8 – Economic Benefit

Pursuant to CWC section 13385(e), civil liability, at a minimum, must be assessed at a level that recovers the economic benefits, if any, derived from the acts that constitute the violation. The Dischargers benefited economically by not enrolling and complying with the State of California's NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities Order No. 2009-0009-DWQ (NPDES No. CAS000002) and for not obtaining a Clean Water Act Section 404 Permit or 401 Water Quality Certification for dredged and fill materials.

To comply with the General Construction Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities order the Discharger would have had to pay an annual Construction Storm Water Program fee, hired a Qualified Storm Water Pollution Prevention Plan (SWPPP) Developer (QSD) to develop a SWPPP for construction and land disturbance activities on the Site, implement erosion and sediment control best management practices (BMPs) in accordance with the SWPPP, and hired a Qualified SWPPP Practitioner (QSP) to inspect those BMPs, monitor the Site and storm water discharges from the Site, take corrective actions when needed, and write and submit monitoring reports to the Central Valley Water Board. To obtain a Clean Water Act Section 401 Water Quality Certification the Discharger would have had to submit an application and application fee.

The annual Construction Storm Water Program fee for fiscal year 2014-15 for the construction and land disturbance activities the dischargers conducted on the Site is \$606. This is considered an avoided cost because the Discharger cannot retroactively enroll in the Construction Storm Water Program. The estimated cost to have a QSD develop a SWPPP for the Site and to have a QSP to inspect and monitor the site as needed to comply with the

SWPPP and the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities during fiscal year 2014-15 is \$9,350. This is considered an avoided cost as the Discharger cannot retroactively have a SWPPP developed, inspected, or monitored. The estimated minimum cost to implement erosion and sediment control BMPs for the construction and land disturbance activities conducted by the Discharger in 2014 is \$17,140. This is considered a delayed cost as the Discharger will have to implement erosion and sediment control BMPs in compliance with Cleanup and Abatement Order R5-2015-0702. The cost to obtain a Section 401 Water Quality Certification in 2014 is \$3,335.

The Discharger's economic benefit for noncompliance with the Construction Storm Water General Permit and failure to obtain a section 404 permit and section 401 Water Quality Certification is calculated from the delayed and avoided costs listed above using the USEPA's BEN computer program, and is equal to the present value of the avoided costs plus the "interest" on delayed costs. This calculation reflects the fact that the discharger has had the use of the money that should have been used to avoid the instance of noncompliance. The total Benefit of Noncompliance to the Discharger in regards to these violations is calculated to be \$8,078.

The Enforcement Policy states (p. 21) that the total liability shall be at least 10% higher than the economic benefit, "so that liabilities are not construed as the cost of doing business and the assessed liability provides a meaningful deterrent to future violations." Therefore, the economic benefit plus 10% is estimated to be **\$8,886**, which becomes the minimum civil liability which must be assessed pursuant to section 13385 and the Enforcement Policy.

Step 9 – Maximum and Minimum Liability Amounts

The maximum and minimum amounts for discharge violation must be determined for comparison to the amounts being proposed. These values are calculated in the ACL Complaint, and the values are repeated here.

Maximum Liability Amount: \$8,411,430

Minimum Liability Amount: \$8,886

Step 10 – Final Liability Amount

Based on the foregoing analysis, and consistent with the Enforcement policy, the final liability amount proposed for both violations is **\$201,400**.